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BEFORE THE WYOMING PUBLIC SERVICE COMMISSION

IN THE MATTER OF THE APPLICATION OF ROCKY MOUNTAIN POWER FOR MODIFICATION OF AVOIDED COST METHODOLOGY AND REDUCED CONTRACT TERM OF PURPA POWER PURCHASE AGREEMENTS WITH QUALIFYING FACILITIES	)))))))	DOCKET NO. 20000-545-ET-18 (Record No. 15133)

ROCKY MOUNTAIN POWER'S FIRST SET OF DISCOVERY REQUESTS TO THE ROCKY MOUNTAIN COALITION FOR RENWABLE ENERGY

COMES NOW, Rocky Mountain Power (the "Company") and hereby serves its first set of data requests on the Rocky Mountain Coalition for Renewable Energy ("RMCRE") regarding the above docketed matter, to be answered pursuant to Rules 33, 34, and 36 of the Wyoming Rules of Civil Procedure. Please respond to these data requests within seven (7) calendar days (by May 10, 2019).

DEFINITIONS AND INSTRUCTIONS

The following definitions and instructions apply to each of the requests for production set forth herein and are deemed to be incorporated therein.

(1) **"Document" and "documentation"** should be interpreted as broadly as possible to include, but not be limited to, the original or any copy, regardless of origin or location, of any book, pamphlet, periodical publication, letter, scrapbook, diary, calendar, canceled check, photograph, form, memorandum, schedule, tax return, telegram, telex, report, record, order or notice of governmental action of any kind, study, minutes, logs, graph, index, tape, disc, internal operating manual, data sheet or data processing card, or any other written, recorded, transcribed, punched, taped, filmed, graphic or retrievable matter or data of any kind, however produced or reproduced, to which you have or have had access. This definition is intended to include, but not be limited to, all documents which have been created and/or which reside in any type of electronic format and is to be construed in its most comprehensive sense as contemplated by the Wyoming Rules of Civil Procedure.

(2) **"Person or Entity"** should be interpreted to denote, unless otherwise specified, any natural person, firm, corporation, association, group, individual or organization of any type whatsoever.

(3) Any request to **"identify"** or **"provide"** should be interpreted to mean:

a) With respect to a natural person, that person's full name, title, job description, and business and home address. Where the identification pertains to a past period, as to each person identified who is still in your employ, or the employment of the group with which such person is identified in response to any requests, provided, in addition, that person's title and job description as of the time of such past period. Where the person is no longer in your employ or the employment of the group with which such person is identified in response to any request, provide that person's affiliate, position, home and business address, if known, or if not known, such person's last known affiliation, position, home and business address, or portions thereof as may be known.

b) With respect to an entity other than a natural person, that entity's name, business, type of entity, present status and present or last known address.

c) With respect to a document, that document's title, date, author (and, if different, the signer), addresses, recipients, or other persons who assisted in the preparation, subject matter or general nature, and any amendments thereto, present location and custodian, whether or not such document is in the respondent's possession, custody or control and whether or not the document is claimed to be privileged. The final version and each draft of each document should be identified and produced separately. Each original and each non-identical copy (bearing marks or notations not found on the original) of each final version and draft of each document should be identified and produced separately.

d) With respect to a physical facility, the location of the facility, the intended purpose of the facility, the actual use of such facility, the operating dates of the facility, the installation date of the facility, the date utilization of the facility terminated if applicable, and whether the facility is subject to the jurisdiction of the Federal Energy Regulatory Commission, the Public Service Commission of Wyoming, or any other regulatory body.

(4) **"Communication"** should be interpreted to include, but not be limited to, all forms of communication, whether written, printed, oral, pictorial, electronic or otherwise, including testimony or sworn statement, or any means or type whatsoever.

(5) **"Relating To"** or **"Related To"** means pertaining to, presenting, discussing, commenting on, analyzing, or mentioning in any way.

(6) The term **"and"** and **"or"** should be construed either disjunctively or conjunctively whenever appropriate in order to bring within the scope of each request any information or document which might otherwise be considered to be beyond its scope.

(7) The singular form of a word should be interpreted as plural, and the plural form of a word should be interpreted as singular, whenever appropriate in order to bring within the scope of each request any information or document which might otherwise be considered to be beyond its scope.

DATA REQUESTS

1.1 Please provide copies of all past and future data requests and data responses received by RMCRE or sent by the RMCRE to any other party in this docket. Please include both formal and informal responses.

1.2 Provide workpapers supporting all values, tables, and figures referenced within the testimony.

1.3 Referring to page 10, lines 191-194 of Hans Isern's direct testimony in this matter, what is the typical term of a tax equity financing on a utility scale wind generation asset in North America

   a. In your years of significant experience, are you aware of any utility scale wind generation assets being financed solely via a tax equity financing as compared to tax equity and back leverage financing or traditional project financing?

   b. Has sPower provided tax equity financing for wind or solar development, and if so, what is the typical length of these financings from the time you invest the equity to when you exit the deal via repurchase of the shares by the sponsor?

1.4 Referring to page 6, lines 111-113 of Hans Isern's direct testimony in this matter, if a qualifying facility ("QF") developer's costs to build a facility are materially higher than projected, or equipment fails and the QF has to make additional investments above their maintenance capital budget, and they therefore default on their financing due to not meeting their debt service requirements and are forced to abandon the project, will the energy and capacity that the Company has incorporated into its plans be no longer available?

   a. If so, who bears the replacement costs of that energy and capacity?

1.5 Referring to page 6, lines 118-125 of Hans Isern's direct testimony in this matter, if a QF shuts down its QF prior to the end of the contract and therefore defaults on its contract with the Company, is the Company able to replace the energy and capacity that the QF had contractually agreed to supply at the same price and for the same term as in the defaulted contract?

   a. If the answer is "No," who is at risk for the costs of this replacement capacity and energy?

1.6 Referring to page 7, lines 138-143 of Hans Isern's direct testimony in this matter, answer the following question by indication yes or no.

a. Would sPower be willing to undertake a 20 year transactions with the following developers with the following profiles at the exact same fixed price?

i A publicly traded developer that operates a fleet of solar and wind assets with an unsecured senior debt credit rating of BBB+/B3, balance sheet assets of at least $10 Billion and readily accessible quarterly and annual audited financial statements, that is willing to post an unlimited corporate guaranty that converts to a $100/kW Letter of Credit in event that the debt rating falls to BBB-/B1 or below as default security.

ii A private developer that will provide no audited or unaudited financial statements, does not have a credit rating from one of the three major credit rating agencies, does not operate any wind or solar assets, and posts a $100/kW Letter of Credit as default security.

1.7 Referring to page 10, lines 191-194 of Hans Isern's direct testimony in this matter, assuming avoided costs are accurately calculated and truly reflect a utility's avoided cost as that term is used in the Public Utility Regulatory Policies Act of 1978, does the addition of an incremental QF for a given utility drive utility rates higher, lower, or would they stay neutral?

a. Does a rate set at what the utility would otherwise pay for the same amount of energy from its own resources accurately capture the evolution of energy technology?

b. If energy technology improves such that the cost to construct a solar facility is substantially lower, would that benefit be reflected in the avoided costs of a utility that had not yet built or contracted for energy from a facility that incorporates that new technology?

c. Assuming the answer to 1.7b is "no" regardless of the actual answer, explain whether the QF developer or the utility and its customers keep the delta between the utility's avoided costs and the lower cost of the solar facility incorporating the new lower cost technology?

d. Assuming the answer to 1.7b is "no" regardless of the actual answer, if the same utility held a competitive request for proposals ("RFP") seeking non-QF power purchase agreements ("PPA") from renewable developers, would the lower cost associated with the new technology be reflected in the prices bid by RFP participants?

1.8 Referring to page 10, lines 197-208 of Hans Isern's direct testimony in this matter, Mr. Isern states that the comparison of how different states choose to exercise their PURPA implementation rights provided in Mark Tourangeau's direct testimony is not relevant to the discussion of how Wyoming may choose to exercise their rights, does Mr. Isern agree that the decision by the Montana State Court regarding QF PPA terms and avoided cost prices is irrelevant to this docket in Wyoming, especially since Montana's avoided cost prices are calculated using a different method than those calculated by the Company in Wyoming?

1.9 Referring to page 11, lines 212-215 of Hans Isern's direct testimony in this matter, please provide evidence of where corporate purchases of renewable energy were transacted at a "premium."

a. Provide examples of PPAs that were contracted in organized markets with corporate buyers that were contracted at a "premium."

b. Describe what this premium consists of and provide evidence from the markets where these PPAs were transacted that these PPA prices contain a premium vs PPAs contracted with either a host utility under a bilateral negotiation or via a QF contract.

c. How is this premium calculated and what risks are this premium meant to mitigate?

1.10 Referring to page 11, lines 220-223 of Hans Isern's direct testimony in this matter, explain how Mr. Tourangeau's testimony is 'misleading' if in fact all PPAs contained in the aggregated number of ~4,500 MWs all have terms of 15 years or less.

1.11 Referring to page 11, lines 223-225 of Hans Isern's direct testimony in this matter, provide evidence that there have been tens of gigawatts of renewable capacity contracted under PPAs of fifteen years or more.

1.12 Referring to pages 11 & 12, lines 226-235 of Hans Isern's direct testimony in this matter, Mr. Isern states that a QF developer in Wyoming will have no expectation of a buyer at the conclusion of the PPA term, but at the end of the term will the QF project still be able to qualify as a QF?

a. Assuming the answer is "yes," will the facility still be able to compel the Company or another utility to purchase the output of the facility? If the answer to the question is "no," explain that answer.

1.13 Referring to pages 12 & 13, lines 245-255, and to page 15, lines 295-302 of Hans Isern's direct testimony in this matter, has sPower attempted to refinance project-level debt with syndicated funding that includes projects with terms shorter than 19 years?

a. If "yes," explain the attempted refinancing in detail, and state whether the refinancing was successful and if it was not, why not.

b. If QF developers are taking advantage of the utility's credit rating to achieve lower financing costs, and therefore greater profits is that a form of "ratepayer subsidy"?

c. What about other risks that utilities, and ultimately the utilities' customers, bear in QF PPAs, like costs associated with QF non-dispatchability or greater credit risk, are those "ratepayer subsidies"?

1.14 Referring to page 13, lines 254-255 of Hans Isern's direct testimony in this matter, under PURPA, is it the individual state's that implement PURPA's responsibility to ensure that all QF projects are 'financeable'?

1.15 Referring to pages 13 & 14, lines 268-274 of Hans Isern's direct testimony in this matter, do non-utility developers compete when RFPs are issued by utilities for incremental renewable generation?

a. In general, are larger renewable projects better able to achieve economies of scale and therefore provide power for a lower overall per MWh price than smaller facilities?

b. From January 1, 2015 to the present, provide the pricing for each sPower developed project with an executed PPA, include the size of each project, the location and indicate whether the project contracted as a QF or otherwise?

1.16 Referring to pages 14, lines 268-274 of Hans Isern's direct testimony in this matter, explain how a QF that has formula-based avoided cost contract pricing, pricing that can be "stale" by up to 30 months under current rules prior to the QF beginning to supply energy to the Company, is providing competition in this market sector?

1.17 Referring to page 14, lines 275-283 of Hans Isern's direct testimony in this matter, define "marginal costs" as used in Mr. Isern's testimony.

a. Define "avoided costs" as used under PURPA and its supporting regulations.

b. Does PURPA require marginal cost pricing or avoided cost pricing?

1.18 Referring to page 7, lines 131-148 of Mark Klein's direct testimony in this matter, Mr. Klein states that shorter terms means greater risk for QF developers, and therefore lower returns for investors. Is the inverse also true that longer terms means lower risk for QF developers and therefore higher returns for investors?

a. Provide all studies, analyses or other information that either RMCRE or VK Clean Energy Partners has demonstrating the likely returns for a QF project at a 7 year term, a 10 year term, a 15 year term, and a 20 year term.

b. Does PURPA require states to guaranty QF developers a given rate of return on their investments in QF facilities?

1.19 Referring to page 7, lines 149-152 of Mark Klein's direct testimony in this matter, Mr. Klein states that if the maximum term is shortened to 7 years "the price per MWh must rise," is this still true if the QF developer was willing to accept a lower return on its investment that corresponds to the greater risk seen by investors?

a. Provide all data used or relied upon to support the answer.

b. Provide all studies, analyses or other information Mr. Klein relies on to support his contention that "The price per MWh for a seven-year PPA would be prohibitively high." To the extent such data shows projected prices per MWh please also provide the assumed costs, and the assumed returns for each price and term length analyzed.

1.20 Referring to page 8, lines 153-159 of Mark Klein's direct testimony in this matter, Mr. Klein asserts that QF lenders are unlikely to provide financing beyond the term of a QF PPA, assuming the facility retains its QF status and can compel a utility to buy its output, if the financing is fully paid at the end of a first 7 year term at a lower rate of return, what would the impact be on returns in that subsequent 7 year term?

1.21 Referring to pages 11 and 12, lines 233-225 of Mark Klein's direct testimony in this matter, the testimony states that the "Rural Development program and the Rural Energy for America Program are designed for rural landowners who have an interest in developing a small renewable project on their own land."

a. What was the intent of PURPA when it was passed by Congress in 1978?

b. Does VK Clean Energy consider the QF developments they undertake to be small renewables energy projects?

c. What size project in nameplate capacity does VK Clean Energy consider to be a large project?

d. Does VK Clean Energy believe that the projects they develop that are greater than 25 MW are small renewable energy projects, or are they utility scale energy projects?

e. Is Mr. Klein aware of the fact that the Rural Development program and the Rural Energy for America Program actually do provide finance opportunities for small renewable QF projects?

i Is it Mr. Klein or RMCRE's position that these programs are not effective examples of financing options for QFs because they do not provide the magnitude of financing necessary for the large, utility-scale projects undertaken by VK Clean Energy?

1.22 Referring to pages 11 and 12, lines 233-225 of Mark Klein's direct testimony in this matter, Mr. Klein states that "Most QF developers do not own the land on which they develop their projects."

a. Provide the number of Wyoming and Montana QF projects (of any and all sizes) that are owned by the host landowners vs the number of QF projects that are leasing land for their projects.

1.23 Referring to page 12, lines 250-252 of Mark Klein's direct testimony in this matter, Mr. Klein uses the term "utility scale." Are standalone 80 MW facilities "utility scale"?

a. If PURPA did not have an 80 MW cap on what constitutes a qualifying "small power production facility" would QF developers be more or less likely to size their projects at 80 MW or less?

b. Why do QF developers, like VK Clean Energy Partners, site multiple 80 MW QF projects just over a mile apart from each other, often with shared an interconnection points, common ownership, and similar construction schedules?

1.24 Does the RMCRE agree that the Company's proposed PDDRR methodology is sufficient under all circumstances to determine the type and quantity of resources that will be considered deferrable for the purposes of QF pricing for all combinations of deferrable resources and QFs? If not, please identify what aspects are not sufficiently identified and provide examples illustrating how the type or quantity of resource deferral is uncertain.

1.25 Does RMCRE support the Company's proposed PDDRR methodology? If not, please explain how the type and quantity of resources that will be considered deferrable for the purposes of QF pricing for all combinations of deferrable resources and QFs. At a minimum the deferrable and QF resource types should include baseload, solar, wind, and seasonal hydro. Please provide examples illustrating the determination of the type and quantity of resource deferral.

DATED this 3rd day of May, 2019.

Respectfully submitted,

ROCKY MOUNTAIN POWER

/s/ Jacob A. McDermott

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Attorney for Rocky Mountain Power

CERTIFICATE OF SERVICE

I hereby certify that on May 3, 2019, I caused to be served, via email a true and correct copy of Rocky Mountain Power's **FIRST SET OF DISCOVERY REQUESTS TO THE ROCKY MOUNTAIN COALITION FOR RENWABLE ENERGY** to the following service list:

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